

17. A heat-insulating coating as claimed in claim 16, whose cholesteric layers have mutually different reflection maxima in the wavelength range > 750 nm.

18. A heat-insulating coating as claimed in claim 14, which comprises two or more cholesteric layers, the pitch of the helical superstructures of 2 layers in each case being identical but their handedness being different.

→ 19. A heat-insulating coating as claimed in claim 14, which between layers having a helical superstructure of identical pitch and identical handedness has a medium which reverses the direction of rotation of the transmitted circularly polarized light.

20. A heat-insulating coating as claimed in claim 19, which reflects at least 75% of the incident radiation in the wavelength range above 750 nm.

21. A heat-insulating coating as claimed in claim 14, which in the cured state comprises cholesteric compounds or mixtures of compounds selected from

- a) at least one cholesteric polymerizable monomer;
- b) at least one achiral, nematic, polymerizable monomer and a chiral compound;
- c) at least one cholesteric crosslinkable polymer;
- d) at least one cholesteric polymer in a polymerizable diluent or a mixture of polymerizable diluents;
- e) at least one cholesteric polymer whose cholesteric phase can be frozen in by rapid cooling to below the glass transition temperature; or
- f) at least one achiral, liquid-crystalline crosslinkable polymer and a chiral compound.

22. A process for producing a heat-insulating coating as claimed in claim 14, which comprises applying to a transparent substrate at least one cholesteric IR-reflecting layer, curing it, applying, if desired, one or more further cholesteric IR-reflecting layers and, if

desired, a medium which reverses the direction of rotation of the transmitted circularly polarized light, curing said layer(s) and so completing the heat-insulating coating.

23. A multicomponent coating system, comprising components capable of forming cholesteric layers in accordance with the definition in any of claim 17.

24. A heat-insulating coating as claimed in claim 14 for producing insulating windows or heat-insulating transparent construction materials or for insulating residential, office or industrial buildings.

25. A heat-insulating coating as claimed in claim 14 for use in the automotive sector, especially for producing heat-insulating laminated glass screens.

26. A film, comprising a heat-insulating coating as claimed in claim 14.

27. The film as claimed in claim 26, which is an adhesive film.--

REMARKS

Claims 14-27 are active in this application.

Newly added Claims 14-27 are supported by the specification at pages 3-44 and by original Claims 1-13. No new matter is believed to have been added to this application by these amendments.

Applicants submit that the present application is ready for examination on the merits.

Early notice to this effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

James J. Kelly, Ph.D.
Registration No. 41,504

Crystal Square Five - Fourth Floor
1755 Jefferson Davis Highway
Arlington, VA 22202
(703) 413-3000
Fax #: (703) 413-2220
JK/NFO/rac

I:\atty\JK\05243264.PR

WILLIAM E. BEAUMONT
REGISTRATION NUMBER 30,996